

this separation, as the subcutaneous tissue is very loose. The anterior half of the clavicle is then separated from the rest of the bone and lifted with the flap, which has an attachment at its base above. The lower loose portion is then wrapped around the under surface of the separated piece of bone, and eight days are allowed to pass for the development of firm adhesions between the bone piece and its enveloping flap. It can then, by means of a sufficiently long skin flap above, be transplanted into the defect in the lower jaw.

The Treatment of Biliary Lithiasis.—BENOIT (*Jour. d. méd. et d. chir.*, 1908, iii, 329) gives a *resume* of the teachings of Gilbert, Carnot, and Jomier on the medical treatment, as well as that of Mongour on the surgical treatment, of gallstones, these men representing the French school. The arthritic diathesis predisposes to gallstones. The local conditions favoring their formation are infection of the gall-bladder and relative stagnation of the bile. In women, in addition to the usual causes of bile stagnation, there is the use of corsets. Preventive medicine depends more upon hygiene than upon drugs. There is no doubt that the alkaline salts, bicarbonate of sodium in particular, will aid in keeping the bile in a fluid form. Calomel, by its cholagogue action, tends to combat the torpor of the liver, but cannot be kept up long because of its disturbing effect on the digestive tract. Hygiene is most important, and the diet should be especially lactovegetarian. Hydrotherapy in all its forms favors elimination by the skin, as well as frictions, massage, and sports not to excess. In the greater number of the cases one is justified in provoking or aiding the migration of the calculus, as by calomel and sodium sulphate, which increase the biliary flow, and by salicylate or benzoate of sodium, which are cholagogues and antiseptics. Olive oil is advised for stones in the common duct. The remarkable toleration of the biliary tract, and the good effect of therapeutic measures, will often render surgical action unnecessary. Mongour, reporting on the surgical side, said that operation should be a therapeutic exception. Those who argue for early operation, that is, on the first attack of colic, are not justified by the facts or results. Biliary lithiasis is not, exclusively, a local affection, and operation does not affect the diathesis. In spite of possible complications, lithiasis ought to be considered a benign affection, as shown by statistics from Vichy and those published by the International Congress of Insurance Companies. The operative death rate, even in the more favorable cases, is more than 2 per cent. It is greater than that if one takes into account the late postoperative accidents. Finally, operation does not insure the patient against recurrences. When the stones are in the gall-bladder, the indications, as formulated by Mongour, are as follows: Exceptionally frequent and painful cases; when the patient cannot follow a prolonged medical treatment; in infection of the gall-bladder, especially in chronic cases; in cases of general infection starting from the gall-bladder. If the stones are in the common duct, the time of operation depends upon: (1) the quality of the biliary secretion, and (2) the nature and intensity of the local or general infectious complications. Operation should be done when the bile appears in the urine, and can be deferred as long as there is only a simple jaundice.

The Prevention of Kidney Stone Recurrence.—KLEMPERER (*Deut. Zeitschr. f. Chir.*, 1908, xcv, 304) says that the recurrence of renal calculi after they have been removed by operation is well known. An abundant free flushing of the kidney and its pelvis will prevent the deposit of calculous particles. The original nucleus is of microscopic size, and its increase in volume depends upon the apposition of the urinary sediment, which is possible only in a slowly escaping or stagnating stream. The most important point in the treatment, therefore, is to administer large quantities of liquid by the mouth. The drinking of 200 or 300 c.c. of fluid, every two or three hours, and especially a large quantity before going to bed is advised. The night urine is particularly inspissated and prone to sedimentation. Still more fluid should be drunk during the night, especially by old people, who frequently get out of bed. The kind of drink is not very important, the alkaline, carbonic acid, mineral waters being preferred. Even alcoholic drinks may be taken. Obesity and heart weakness favor calculi formation. Von Örtel and Schweninger believe that much drink increases the obesity. Experience and physiological experiments, however, have shown that much fluid in an empty stomach favors emaciation, so that fat people should not drink during meals. Patients suffering from cardiac disturbances should take fluid during periods of disturbed compensation more cautiously. According to Klemperer's observations, the stones in these cases are small and round, and are passed without much difficulty. A mixed diet is preferable to a uniform one, which favors the formation of an acid urine and, therefore, an increased sediment. An alkaline reaction due to the administration of the carbonates can favor the deposit of phosphates. In his collection of kidney stones are several in which the acid nucleus is coated with a white, phosphatic layer. Patients with urate or oxalate calculi should take a moderate amount of meat with vegetables and fruits. Medicines are usually of little value. In cases with oxaluria, however, small doses of magnesium sulphate, which are excreted by the urine and can take up calcium oxalate in solution, should be given. When the alkalinity of the urine is due to infection, of more importance than diet or urinary antiseptics is the mechanical effect of flushing the kidneys or the removal of any existing obstruction.

Diffuse Septic Peritonitis Due to Appendicitis.—FOWLER (*Annals of Surgery*, 1908, xlviii, 828) says that we must look for a lowering of the high mortality rate in early operation rather than in any further development in mechanical intervention. Early postural drainage is of greater aid in preventing septic material from reaching the diaphragmatic peritoneum than in preventing further absorption after this area is once involved. The manner of instituting postural drainage matters little, provided the pelvis is sufficiently low for gravitation to take place and the patient is comfortable. Peritoneal lavage dilutes septic material, and when practised should be continued until the cavity is partially closed. Plastic lymph not removed by irrigation or by simple lifting should not be disturbed. All cases of this nature should be drained. The ideal method, in women, is by a posterior colpotomy incision, by means of a large rubber tube. Cases not drained frequently develop pus pockets and superficial wound infections. Ochsner's